

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Marc Sherman
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Serial Number: 10/614,761
Title: Method of Optimizing Pick-to-Ship Process
Examiner: Oger Garcia Ade
Art Unit: 3627

**Mail Stop Appeal Brief – Patents
Commissioner for Patents
P O Box 1450
Alexandria, VA 22313-1450**

APPELLANT'S BRIEF

This brief is in furtherance of the Notice of Appeal, filed in this case on July 10, 2007.

The fees required under § 1.17(c), and any required petition for extension of time for filing this brief and fees therefore, are dealt with in the accompanying Transmittal of Appeal Brief.

I. REAL PARTIES IN INTEREST

The real party in interest in this appeal is the following party: Aftermarket Technology Corp.

II. RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

III. STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1 - 12.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims pending: 1-12.
2. Claims previously cancelled: None.
3. Claims withdrawn: None.
4. Claims rejected: 1-12.
5. Claims allowed: None.
6. Claims cancelled in accompanying amendment: None.

C. CLAIMS ON APPEAL

The claims on appeal are: 1-12.

IV. STATUS OF AMENDMENTS

No amendments were filed after final rejection.

V. SUMMARY OF INVENTION

The present invention as recited in independent claim 1 provides a method for fulfilling orders.¹ Many product orders are filled with the use of a “pick” document, which serves as a checklist that warehouse personnel use in gathering items to be included in an order.² Typically, picking documents are printed, the product is picked from storage bins and placed into a shipping box, which is then placed on a conveyor belt that carries it to a shipping station.³ At the shipping station a shipping document, Mobile Identification Number (MIN) label and shipping label are printed, and the order is shipped. Once the paperwork prints it is placed in the box and sent to the carrier.⁴ In this process, the product is being handled twice at two separate stations, once for picking, once for shipping, requiring both greater labor and more time compared to a single-stage fulfillment process.⁵ The method of the invention includes receiving a product order that specifies product type and quantity and then printing a document that lists the content of the order.⁶ An order identification code (i.e. barcode) on the document is input by warehouse personnel.⁷ Next a product identification code taken from a physical product is input and compared with the product order.⁸ If the product corresponding to the product identification code is part of the order, acquisition of the product is confirmed and it is toward completion of the order.⁹ If the product corresponding to the product identification code is not part the order, an error signal is returned.¹⁰ The above steps are repeated until the specified quantity of each product type in the order is entered.¹¹ An error signal is returned if more than the specified quantity of any product in the order is input.¹² The order is completed and a shipping label is printed only after all products contained in the order have been acquired and entered in the specified quantity.¹³ The present invention uses a reconfigured picking document that includes all information required on the shipping document and has a peel off label on which a Mobile

¹ Application, page 3, line 3.

² Application, page 2, lines 10-12.

³ Application, page 2, lines 12-14.

⁴ Application, page 2, lines 14-16.

⁵ Application, page 2, lines 16-20.

⁶ Application, page 3, lines 3-5.

⁷ Application, page 3, lines 5-6.

⁸ Application, page 3, lines 6-7.

⁹ Application, page 3, lines 7-9.

¹⁰ Application, page 3, lines 9-10.

¹¹ Application, page 3, lines 10-11.

¹² Application, page 3, lines 11-12.

¹³ Application, page 3, lines 12-14.

Identification Number (MIN) is printed, allowing the document to be used as both a pick document and shipping document.¹⁴

The present invention as recited in independent claim 5 provides a computer program product for fulfilling orders.¹⁵ The program product includes instructions for receiving a product order that specifies product type and quantity and then printing a document that lists the content of the order.¹⁶ The program product includes instructions for accepting an order identification code on the document that is input by warehouse personnel.¹⁷ The program product includes instructions for accepting the input of a product identification code taken from a physical product and comparing said identification code with the product order.¹⁸ If the product corresponding to the product identification code is part of the order, the program product confirms acquisition of the product toward completion of the order.¹⁹ If the product corresponding to the product identification code is not part the order, the program product returns an error signal.²⁰ The program product repeats the above steps until the specified quantity of each product type in the order is entered.²¹ The program product returns an error signal if more than the specified quantity of any product in the order is input.²² The program product completes the order and prints a shipping label only after all products contained in the order have been acquired and entered in the specified quantity.²³

The present invention as recited in independent claim 9 provides a system for fulfilling orders.²⁴ The system receives a product order that specifies product type and quantity and prints a document that lists the content of the order.²⁵ The system accepts an order identification code on the document that is input by warehouse personnel.²⁶ The system accepts the input of a product identification code taken from a physical product and compares said identification code

¹⁴ Application, page 5, lines 4-7.

¹⁵ Application, page 3, line 3.

¹⁶ Application, page 3, lines 3-5.

¹⁷ Application, page 3, lines 5-6.

¹⁸ Application, page 3, lines 6-7.

¹⁹ Application, page 3, lines 7-9.

²⁰ Application, page 3, lines 9-10.

²¹ Application, page 3, lines 10-11.

²² Application, page 3, lines 11-12.

²³ Application, page 3, lines 12-14.

²⁴ Application, page 3, line 3.

²⁵ Application, page 3, lines 3-5.

²⁶ Application, page 3, lines 5-6.

with the product order.²⁷ If the product corresponding to the product identification code is part of the order, the system confirms acquisition of the product toward completion of the order.²⁸ If the product corresponding to the product identification code is not part the order, the system returns an error signal.²⁹ The system repeats the above steps until the specified quantity of each product type in the order is entered.³⁰ The system returns an error signal if more than the specified quantity of any product in the order is input.³¹ The system completes the order and prints a shipping label only after all products contained in the order have been acquired and entered in the specified quantity.³²

VI. ISSUE

Claims 1-12 are rejected under 35 U.S.C. §103(a) as unpatentable over the patent to Johnson et al. (US Patent No. 5,712,989) in view of Pape et al. (US Patent No. 6,505,094).

VII. GROUPING OF CLAIMS

The claims stand or fall together.

VIII. ARGUMENTS

REJECTIONS UNDER 35 U.S.C. 103(a)

Prior to discussing the specific claims under appeal, we shall look first at the final rejection. The final Office Action states,

As per claims 1, 5, and 9, Johnson discloses a method for fulfilling orders, comprising the steps of: receiving a product order [see abstract (e.g. the system proposes a purchase or transfer order)], wherein the order specifies product types and quantity [see column 2, lines 22-26 (e.g. optimum *quantity of the item*), and see flowchart of figure 3 (e.g. *block 213*)]; printing a document [see flowchart of figure 1, via *printer 43*] that lists the content of the order and includes an order identification code [see column 11, lines 15-23, column 13, lines 32-37, and see flowchart of figure 4A (as shown in *step 246*)]; receiving an input of the order

²⁷ Application, page 3, lines 6-7.

²⁸ Application, page 3, lines 7-9.

²⁹ Application, page 3, lines 9-10.

³⁰ Application, page 3, lines 10-11.

³¹ Application, page 3, lines 11-12.

³² Application, page 3, lines 12-14.

identification code, receiving an input of a product identification code taken from a physical product [see column 7, lines 40-67, and table 3, columns 24 and 25 (e.g. **physical inventory** adjustment)]; comparing the product identification code with the product order [via host computer 10, column 14, lines 29-47, and see flowchart of figure 4B (e.g. block 254)]; if the product corresponding to the product identification code is part of the order, confirming acquisition of the product and entering it toward completion of the order [see flowchart of figure 5B (e.g. block 372), and column 28, lines 10-23]; if the product corresponding to the product identification code is not part of the order, returning an error signal [see flowchart of figure 6A (e.g. **block 388**)]; repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input [see flowchart of figure 6A (e.g. **block 392**), and see flowchart of figure 6B (blocks 400-410)].

Johnson does not explicitly disclose completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity.

However, Pape discloses completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity [see flowchart of figure 5A (e.g. **block 615**), via control system 400].

Therefore, it would have been obvious to one of ordinary art [sic] at the time of the [sic] invention was made to modify Johnson's invention to include Pape's shipping printing method. The motivation to combine will provide build-to-order products and direct shipment of products to customer [see summary of the invention]. (Emphasis in the original)

Claims 1, 5, and 9 recite:

1. A method for fulfilling orders, the method comprising the computer implemented steps of:
 - (a) receiving a product order, wherein the order specifies product type and quantity;
 - (b) printing a document that lists the content of the order and includes an order identification code;
 - (c) receiving an input of the order identification code,
 - (d) receiving an input of a product identification code taken from a physical product;
 - (e) comparing the product identification code with the product order;
 - (f) if the product corresponding to the product identification code is part of the order, confirming acquisition of the product and entering it toward completion of the order;
 - (g) if the product corresponding to the product identification code is not part the order, returning an error signal;
 - (h) repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input; and

(i) completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity.

5. A computer program product in a computer readable medium, for fulfilling orders, the computer program product comprising:

- (a) first instructions for receiving a product order, wherein the order specifies product type and quantity;
- (b) second instructions for printing a document that lists the content of the order and includes an order identification code;
- (c) third instructions for receiving an input of the order identification code,
- (d) fourth instructions for receiving an input of a product identification code taken from a physical product;
- (e) fifth instructions for comparing the product identification code with the product order;
- (f) sixth instructions for confirming acquisition of the product and entering it toward completion of the order if the product corresponding to the product identification code is part of the order;
- (g) seventh instructions for returning an error signal if the product corresponding to the product identification code is not part the order;
- (h) eighth instructions for repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input; and
- (i) ninth instructions for completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity.

9. A system for fulfilling orders, comprising:

- (a) a communication mechanism for receiving a product order, wherein the order specifies product type and quantity;
- (b) a first printer for printing a document that lists the content of the order and includes an order identification code;
- (c) a first input component for receiving an input of the order identification code,
- (d) a second input component for receiving an input of a product identification code taken from a physical product;
- (e) a comparator for comparing the product identification code with the product order;
- (f) an item entry component for confirming acquisition of the product and entering it toward completion of the order if the product corresponding to the product identification code is part of the order;
- (g) an error component for returning an error signal if the product corresponding to the product identification code is not part the order;
- (h) a component for repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input; and

(i) a second printer for printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity and the order is completed.

The Johnson system primarily manages Just in Time (JIT) inventory. Part of the process is determining the necessary replenishment of inventory items:

The system of the present invention also utilizes means for automatically determining which items in the JIT inventory are likely to require replenishment. The system then proposes a purchase or transfer order for an optimum quantity of the item, which the CSR may accept or modify. (Col. 2, lines 22-26)

Johnson does not teach the limitations of the claimed invention. Claims 1, 5 and 9 relate to fulfilling a product order. In contrast, Johnson discloses a process for generating a replenishment order for inventory.

Regarding the requisition process, Johnson teaches:

For items of product type 05, the CSR will create an order record or document ordering the item on behalf of the customer or confirming an order placed on behalf of the customer (e.g., by telephone to the designated vendor).

For items of product type 05, the CSR may order the item for the Customer. **These orders are not placed or filled using the system of the present invention**, although data regarding these transactions may be entered on Non-Catalog Information data screen 80 to record these transactions. Instead, either the proposed purchase order record is uploaded into the customer's computer for processing or a document is printed at local printer 43 for signature and action by the customer's purchasing agent or the CSR confirms that the order has been placed with the designated vendor by some other means. (col. 11, lines 9-23) (emphasis added)

As can be seen above, Johnson does not teach the same pick-to-ship steps as those recited in the claims.

Regarding the Examiner's reference to Table 3 (col. 24-25), this table does not relate to the entry of an order identification code but rather to explanation codes used by a customer service representative to manually adjust inventory numbers:

From time to time, the CSR may need to adjust the value of the quantity on hand of a particular item in JIT facility 51. This can be done using the Inventory Adjustment data screen, a sample of which is set forth in Table VIII. Using the Inventory Adjustment data screen, the CSR may adjust the quantity of an item of product type 01 or 06 up or down by entering PART NUMBER, PLANT CODE (which identifies the JIT facility), TOTAL BIN QTY (the quantity in the relevant bin in JIT facility 51) and the amount of the adjustment in the PLUS or MINUS fields under the ADJUSTMENT QTY heading. The CSR must also enter a

REASON CODE indicating the reason for the adjustment in the appropriate field. Exemplary reason codes are set forth in Table 3: (col. 24, lines 45-58)

Furthermore, the sections related to sourcing teach:

The sourcing of product types 03 and 04 at host computer 10 is described in connection with FIG. 4D. In step 300, host computer 10 receives a data block from local computer 40. By accessing the product type (PT) field for a given line in a received block of requisition data, host computer 10 can readily determine the product type of that line. Assuming that the line is of product type 03, control passes through block 301 to decision block 302. In block 302, host computer 10 determines if the received stock number (STOCK NBR) for the line of requisition data block being processed is a valid Distributor catalog number. Host computer 10 performs this action by comparing the stock number (STOCK NBR) to series of databases described below in connection with cross referencing containing all valid catalog numbers which are stored in host database 20. If the stock number is not recognized, host computer creates a data block with an unrecognized product error code in step 304. This data block is transmitted to local computer 40 in step 312. (Col. 14, lines 29-47)

The above sections describe a process that occurs as a prerequisite to the printing of a pick slip for warehouse personnel. This process determines the availability and source of inventory before the warehouse picking slip is printed.

In contrast, the relevant steps in the claims occur after the picking slip has been printed and is part of the process of verifying that the physical product picked by warehouse personnel matches the identification code on the printed the product order.

The next section cited by the Examiner relates to the generation of inventory replenishment orders:

An exemplary replenishment algorithm may employ two steps, as follows. First, a determination is made as to whether or not to restock the inventory for each item having a Plant Location Table entry. If the quantity available (the quantity on hand (QTY ON HAND)) is less than or equal to the REORDER POINT, then the inventory for the item will be restocked.

Local computer 40 then creates a Replenishment Results Table in the random access memory of local computer 40. There will be one transfer order entry in the Replenishment Results Table for each part to be restocked. Each transfer order entry contains the following information: the relevant part number, product type, the plant location, the restocking source location, maximum order quantity, minimum order quantity, back order quantity, reorder point, quantity on hand and quantity on order from the relevant tables in local database 50. (Col. 27, lines 23-39)

Local computer 40 assigns each transfer order a unique identifying Replenishment Number. For each transfer order, local computer 40 creates and stores a Transfer Order Header Table in local database 50 using the Replenishment Number in local database 50. Local computer 40 then uses the data in the Replenishment Results Table to create and store in local database 50 a Transfer Order Item Table using the procedure described above. The Transfer Order Item Table includes the same information for each item in the Replenishment Results Table that was in the latter table with the addition of the Replenishment Number. Local computer 40 then displays a message on the message line of the currently active data screen to indicate that the replenishment program has been completed. (Col. 28, lines 10-23)

The present invention does not relate to the creation of an inventory replenishment order but rather to the fulfillment of a product order. The process disclosed in Johnson cannot be used to fulfill a product order in the manner recited in claims 1, 5, and 9.

It is doubtful that the Examiner's proposed combination of Johnson and Pape is even technically or logistically feasible, since Pape relates to a manufacturing facility that provides build-to-order products with direct shipment to customers.

However, for the sake of argument, even assuming the Examiner's proposed combination of Johnson and Pape, the resulting combination still would not produce all of the limitations of claims 1, 5, and 9 for the reasons stated above regarding Johnson's teachings.

In response to the above arguments, the final Office Action goes on to state:

A) Applicants argue that the proposed combination of Johnson and Pape does not produce all of the limitations of claims 1, 5, and 9. The Examiner respectfully disagrees. Johnson's system proposes a purchase or transfer flowchart of figure 3 describes an order that specifies a product type and quantity. Johnson also discloses a printer 43 that is also attached to local computer 43 [sic] for printing a document that lists the content of the order and includes an order identification code [see above rejection]. Johnson further discloses a host computer 10 for comparing the product identification code with the product order, which is described in the flowchart of figure 4B. Johnson's flowchart of figure 5B describes programs employed by an embodiment of the system to accept a sourced requisition by confirming acquisition of the product and entering it toward completion of the order.

Johnson does not explicitly disclose printing a shipping label. However, Pape discloses a manufacturing control system 400 preferable prints [sic] the shipping labels for completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity [see flowchart of figure 5A, block 615]. Therefore, Applicant's arguments are deemed nonpersuasive.

However, the Examiner has mischaracterized the processes described by the flowcharts in Figures 3 and 4B of Johnson. Both of these processes relate to the creation of product orders and the cross referencing of those product orders with available inventories. These processes determine the availability and source of inventory before the order is finalized. In contrast to Johnson, the present invention covers the steps that occur *after* an order has been finalized.

Because claims 2-4, 6-8, and 10-12 depend from claims 1, 5 and 9, respectively they are distinguished from Johnson and Pape for the reasons stated above. Furthermore, the dependent claims recite limitations that are not disclosed or suggested by the cited references.

For example, claim 2 recites:

2. The method according to claim 1, wherein the document includes a label containing a mobile identification number than can be peeled off and placed on the outside of a box containing the ordered items.

Claims 6 and 10 recite similar limitations. Neither Johnson nor Pape teach or suggest printing a pick document with a peel off label that includes a mobile identification number.

Claim 3 recites:

3. The method according to claim 1, wherein the document includes a shipping address for the order and serves as a packing list.

Claims 7 and 11 recite similar limitations. Neither Johnson nor Pape teach or suggest a pick document that also serves as a packing list.

The present invention streamlines the process of fulfilling product orders into a single stage by using a reconfigured picking document that includes all information required on the shipping document and has a peel off label on which a Mobile Identification Number (MIN) is printed. Therefore, this document can be used as both a pick document and shipping document, allowing one person to do the work typically performed by two people in most product fulfillment operations. The Johnson and Pape invention do not touch on this issue at all.

In view of the above, Applicant respectfully submits that the rejection of claims 1-12 is overcome. Accordingly, it is respectfully urged that the rejections of claims 1-12 not be sustained.

These claims are therefore allowable.

IX. CONCLUSION

In view of the above arguments, Appellant respectfully submits that all the extant claims are allowable over the cited prior art and that the application is in condition for allowance. Accordingly, Appellant respectfully requests the Board of Patent Appeals and Interferences to overturn the rejections set forth in the Final Office Action.

Respectfully submitted,

Dated: August 23, 2007

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APPENDIX OF CLAIMS ON APPEAL

1. A method for fulfilling orders, the method comprising the computer implemented steps of:
 - (a) receiving a product order, wherein the order specifies product type and quantity;
 - (b) printing a document that lists the content of the order and includes an order identification code;
 - (c) receiving an input of the order identification code,
 - (d) receiving an input of a product identification code taken from a physical product;
 - (e) comparing the product identification code with the product order;
 - (f) if the product corresponding to the product identification code is part of the order, confirming acquisition of the product and entering it toward completion of the order;
 - (g) if the product corresponding to the product identification code is not part the order, returning an error signal;
 - (h) repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input; and
 - (i) completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity.
2. The method according to claim 1, wherein the document includes a label containing a mobile identification number than can be peeled off and placed on the outside of a box containing the ordered items.
3. The method according to claim 1, wherein the document includes a shipping address for the order and serves as a packing list.
4. The method according to claim 1, wherein the identification codes are barcodes that are entered by scanning.

5. A computer program product in a computer readable medium, for fulfilling orders, the computer program product comprising:

(a) first instructions for receiving a product order, wherein the order specifies product type and quantity;

(b) second instructions for printing a document that lists the content of the order and includes an order identification code;

(c) third instructions for receiving an input of the order identification code,

(d) fourth instructions for receiving an input of a product identification code taken from a physical product;

(e) fifth instructions for comparing the product identification code with the product order;

(f) sixth instructions for confirming acquisition of the product and entering it toward completion of the order if the product corresponding to the product identification code is part of the order;

(g) seventh instructions for returning an error signal if the product corresponding to the product identification code is not part the order;

(h) eighth instructions for repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input; and

(i) ninth instructions for completing the order and printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity.

6. The computer program product according to claim 5, wherein the second instructions for printing the document include instructions for printing a label containing a mobile identification number than can be peeled off and placed on the outside of a box containing the ordered items.

7. The computer program product according to claim 5, wherein the second instructions for printing the document include instructions for printing a shipping address for the order, wherein the document serves as a packing list.

8. The computer program product according to claim 5, wherein the identification codes are barcodes.

9. A system for fulfilling orders, comprising:

(a) a communication mechanism for receiving a product order, wherein the order specifies product type and quantity;

(b) a first printer for printing a document that lists the content of the order and includes an order identification code;

(c) a first input component for receiving an input of the order identification code,

(d) a second input component for receiving an input of a product identification code taken from a physical product;

(e) a comparator for comparing the product identification code with the product order;

(f) an item entry component for confirming acquisition of the product and entering it toward completion of the order if the product corresponding to the product identification code is part of the order;

(g) an error component for returning an error signal if the product corresponding to the product identification code is not part the order;

(h) a component for repeating steps (d) through (g) until the specified quantity of each product type in the order is entered, and returning an error signal if more than the specified quantity of any product in the order is input; and

(i) a second printer for printing a shipping label for the order only after all products contained in the order have been acquired and entered in the specified quantity and the order is completed.

10. The system according to claim 9, wherein the document includes a label containing a mobile identification number than can be peeled off and placed on the outside of a box containing the ordered items.

11. The system according to claim 9, wherein the document includes a shipping address for the order and serves as a packing list.

12. The system according to claim 9, wherein the identification codes are barcodes that are entered by scan.

APPENDIX OF EVIDENCE

No affidavits have been submit and relied upon by the Appellant under 37 CFR §§ 1.130, 1.131, or 1.132 in the pending appeal.

APPENDIX OF RELATED PROCEEDINGS

There have been no decisions rendered by a court or the Board in any proceeding pursuant to 37 CFR 41.37 (c)(1)(ii).